

Chris Rust
Mike Ward
Sheffield Hallam University

Chris Rust teaches Product Design and is responsible for links with industry and professional development support for working designers. His research interests include the practical implications of Information Technology for the professional role of 3D designers and the development of public transport. Mike Ward is a freelance illustrator and Associate Lecturer in Packaging and Communication Design at Sheffield Hallam. His research and personal development is focused on new ways to use graphics software.

when workstations dream of virtual sheep

Zeke Conran took a deep breath and counted to ten. There was no way to avoid this moment, it came with the job and each time he started a project he knew that soon enough, a few weeks or months in the future, but getting closer every day, he must face it again.

One by one he ran through the various disaster scenarios and the steps taken to forestall them. The stress analysis bureau had checked and double checked his data model, there was no point of weakness which could be detected despite the unprecedented weight reduction that had been achieved. The moulder had agreed that the 98 per cent recycled polymer mix would, on the basis of every simulation they could run, fill the cavity without perceptible weld lines or sink marks.

Five hundred prototypes had emerged from the fabrication tanks in eight world trading centres and passed the consumer acceptance trials with an agreeable margin. Another five hundred had been absorbed in engineering trials which only confirmed that the pre-prototype fit and function software had done its job.

The Client had been woken on the sun-deck of his yacht somewhere in the South Pacific and, after a gruelling face to face conference, with Zeke jammed inside an ill-fitting Nintendo headset for two hours, had grudgingly agreed that there was no more room for improvement and, with the launch date only two weeks away, it was time to (metaphorically at least) press the button.

Zeke looked out of the window, it was nearly midnight. On the street outside, his flame red Mitsubishi-Porsche roadster waited, its pale blue security aura defying the eco-punk gangs lurking in the shadows beyond. In Sao Paulo it was 7.30pm and the streets were thronging with homebound commuters, but the big guided wire machine had been set up 45 minutes before and only needed his data to start a long night's work on the first cavity.

"OK. Let it go"



he said in an almost imperceptible whisper. There was no response in the room but downstairs the file server instantly made a satellite connection, a brief flurry of protocols and passwords and the model was on its way. Less than two minutes later the first metal was being cut....

Two hours later, unable to sleep, Zeke thought about the phone call from his old college friends, Darren Sainsbury and Tracy Major. They had tracked down a lockup which had belonged to the old Makepeace school when it was forced to move to the derelict Ford site at Dagenham. Nobody knew who owned it but it was stuffed full of wood - real, naturally cured, no word of a lie, twenty years old European hardwoods that must have been stashed there when it became obvious that the EC Fibreboard Compounding Acquisition Directive was going to be enforced.

Tracy had heard of a complete set of woodworking machinery lying forgotten in an abandoned Youth Training Centre in Chelmsford and the two of them had this harebrained scheme to start making furniture. Of course it would be totally illegal even to think of producing hardwood products and there was no way that they could be sold on the legitimate market, but Darren's Uncle Guido knew some very wealthy, very discreet people who would pay extraordinary amounts for brand new, real wood furniture.

"And they don't want repro, the whole point is that they must be totally new designs, preferably one-offs with a guarantee that they will not be repeated."

said Darren excitedly. Zeke thought about the first time that he had met Tracy and Darren. It had been 25 years before at the brand new University of Wigan and Darren had been, for their small group, the high priest of the new computer philosophy of design for industry. Gradually his excitement had infected all of them, the first generation to shrug aside the craft tradition. They plunged wholeheartedly into a bewildering new world of virtual reality, finite element analysis and, everywhere, the shimmering, seductive 3-dimensional images of a super-real environment which seemed so much more desirable than the tired, indebted life of Britain in the 1990's.

Tracy had been the first product designer to announce publicly that

"manufacturing was a waste of time"

when the product could be experienced so much more purely (and cheaply) in a virtual context



British companies had ignored her, as they had ignored virtually every other real innovation for the past century, but a Taiwanese consortium had backed her and been repaid handsomely when her 'Dream Kitchen', developed with Raymond Franc, the revolutionary electronic chef, became the biggest selling software product since Virtual Vera.

Sales of real kitchens plummeted, sounding the knell for the rest of manufacturing industry as the new philosophy of extremely basic environments, overlaid with constantly renewed electronic facades destroyed the traditional markets for finished goods.

Zeke had, for a while, been sucked into Tracy's orbit, feverishly inventing new and more outrageous overlays for Dream Kitchen, Suzuki Overland, Sun City and Tracy's most astounding piece of cosmetic design ever, 'Emergency Ward 10', the product which slashed NHS refurbishment budgets by 84.6 per cent and led, indirectly, to the 'virtual kidney' scandals of 2012.

(Actually the virtual transplant software had been developed purely to give patients a chance to become familiar with, and less nervous of the real operation and the whole notion of 'electronic placebos' was a fantasy dreamed up by the overheated tabloid media)

Soon enough, he had tired of the frantic pace of it all and had since made a reasonable living designing products for the few people left with the will and resources to seek out and use traditional manufactured goods.

Luckily the new technologies had made it feasible to design and manufacture relatively small quantities for a world-wide market but there was a relentless pressure and unreality here too.

As often as not he never saw the finished product, the old High Street stores had vanished and few people in Britain could afford or seemed to want real artefacts. His client's factories in Brazil, Senegal, Iraq and Szechuan served the more vigorous economies of the world's sunbelt and Zeke seemed to spend most of his time plugged in to a virtual design studio nostalgically sited in what was left of Covent Garden. Obviously Darren and Tracy felt equally oppressed by the world that they had done so much to create, but they had done something about it. Did Zeke have the courage to join them in a risky, illegal venture?

A tightening knot of excitement in his stomach signalled a decision about to form. He needed to feel a sharp chisel in his hands again, to see something tangible emerge painstakingly from his labour, to contemplate the mould in the bottom of a coffee mug left too long under a pile of shavings.

He wanted to see the motes of sawdust floating in a beam of sunlight at the workshop door, to make something solid and lasting that could not be just turned off when your credit runs out or a new style catches your fancy - he was going to be a *"Real Designer"*. Ω

